Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

What is claimed is:

1. (Original) A fuel cell system having a fuel cell, said fuel cell system comprising:

a hydrogen storage tank that is supplied with hydrogen under a predetermined hydrogen pressure and contains a hydrogen absorbing material that includes at least a hydrogen storage alloy, said hydrogen storage alloy having a temperature at which the predetermined hydrogen pressure becomes an equilibrium pressure being higher than a temperature of said fuel cell in a steady operation;

a refrigerant channel that circulates refrigerant between said fuel cell and said hydrogen storage tank; and

a heat exchange module that cools down said refrigerant that passed through said fuel cell and/or said hydrogen storage tank.

2. (Original) A fuel cell system according to Claim 1, wherein said refrigerant channel or a part of the refrigerant channel is configured to circulate said refrigerant through said fuel cell, said hydrogen storage tank, and said heat exchange module in this order.

3. (Original) A fuel cell system according to Claim 1, wherein the temperature at which the predetermined hydrogen pressure becomes an equilibrium pressure is an equilibrium temperature at which hydrogen absorption and hydrogen release of the hydrogen storage alloy come equilibrium in hydrogen being supplied with the predetermined hydrogen pressure.

4. (Original) A fuel cell system according to Claim 1 further comprising:

a refrigerant temperature adjustment module that adjusts a temperature of said refrigerant such that said refrigerant that is discharged from said heat exchange module may have an approximately constant temperature regardless of an amount of electric power generation in said fuel cell and regardless whether said hydrogen storage tank is in a state of hydrogen storing or hydrogen releasing .

5. (Original) A fuel cell system according to Claim 4, wherein said refrigerant temperature adjustment module includes a refrigerant flow rate adjustment module that adjusts a flow rate of said refrigerant that flows through said refrigerant channel.

6. (Original) A fuel cell system according to Claim 5, wherein said heat exchange module has a fan for cooling said refrigerant; and said refrigerant temperature adjustment module includes said fan.

7. (Original) A fuel cell system according to Claim 1, wherein said refrigerant channel includes:

a first refrigerant channel that introduces said refrigerant such that said refrigerant passes through said hydrogen storage tank after passing through said fuel cell; and

a second refrigerant channel that is divergent from said first refrigerant channel and introduces said refrigerant such that said refrigerant passes through said hydrogen storage tank without passing through said fuel cell,

wherein said fuel cell system further comprises a flow rate distribution control module that controls a flow rate of said refrigerant that passes through said first refrigerant channel and a flow rate of said refrigerant that passes through said second refrigerant channel.

8. (Previously Presented) A fuel cell system according to claim 1, wherein said fuel cell comprises a proton-exchange membrane fuel cell.

9. (Original) A method of storing hydrogen in a hydrogen storage tank having a hydrogen absorbing material that contains at least a hydrogen storage alloy, wherein the hydrogen absorbing material absorbs hydrogen to be supplied to a fuel cell, said method comprising:

supplying hydrogen to said hydrogen storage tank under a predetermined hydrogen pressure, wherein the predetermined hydrogen pressure is a pressure such that a temperature of said hydrogen absorbing material when hydrogen pressure is an equilibrium pressure in said hydrogen storage tank is higher than a temperature of said fuel cell in a steady operation;

along with the operation of hydrogen supply in said supplying hydrogen, circulating refrigerant in a refrigerant channel that is configured to be passable through said fuel cell and said hydrogen storage tank; and

cooling said refrigerant that passed through said fuel cell and/or said hydrogen storage tank by means of a heat exchange module that exchanges heat with said refrigerant.

10. (Original) A method according to Claim 9, wherein the temperature of said hydrogen absorbing material when hydrogen pressure is the equilibrium pressure is an equilibrium temperature at which hydrogen absorption and hydrogen release of the hydrogen storage alloy come equilibrium in hydrogen being supplied with the predetermined hydrogen pressure.

11. (Previously Presented) A fuel cell system according to claim 2, wherein said fuel cell comprises a proton-exchange membrane fuel cell.

12. (Previously Presented) A fuel cell system according to claim 3, wherein said fuel cell comprises a proton-exchange membrane fuel cell.

13. (Previously Presented) A fuel cell system according to claim 4, wherein said fuel cell comprises a proton-exchange membrane fuel cell.

14. (Previously Presented) A fuel cell system according to claim 5, wherein said fuel cell comprises a proton-exchange membrane fuel cell.

15. (Previously Presented) A fuel cell system according to claim 6, wherein said fuel cell comprises a proton-exchange membrane fuel cell.

16. (New) A fuel cell system according to claim 7, wherein said fuel cell comprises a proton-exchange membrane fuel cell.